

## COVID-19: CDC Museum Closed to the Public

Due to ongoing concerns about the novel coronavirus (COVID-19), the David J. Sencer CDC Museum is closed to the public and will remain closed as we continue to assess and monitor developments. All CDC Museum tours are canceled until further notice.

This decision is being made out of an abundance of caution and based upon the guidance of the CDC regarding social distancing and the elimination of large gatherings.

Please continue to check our website and social media accounts for additional updates.



# The AIDS Epidemic in the United States, 1981-early 1990s



## A New Pattern Emerges

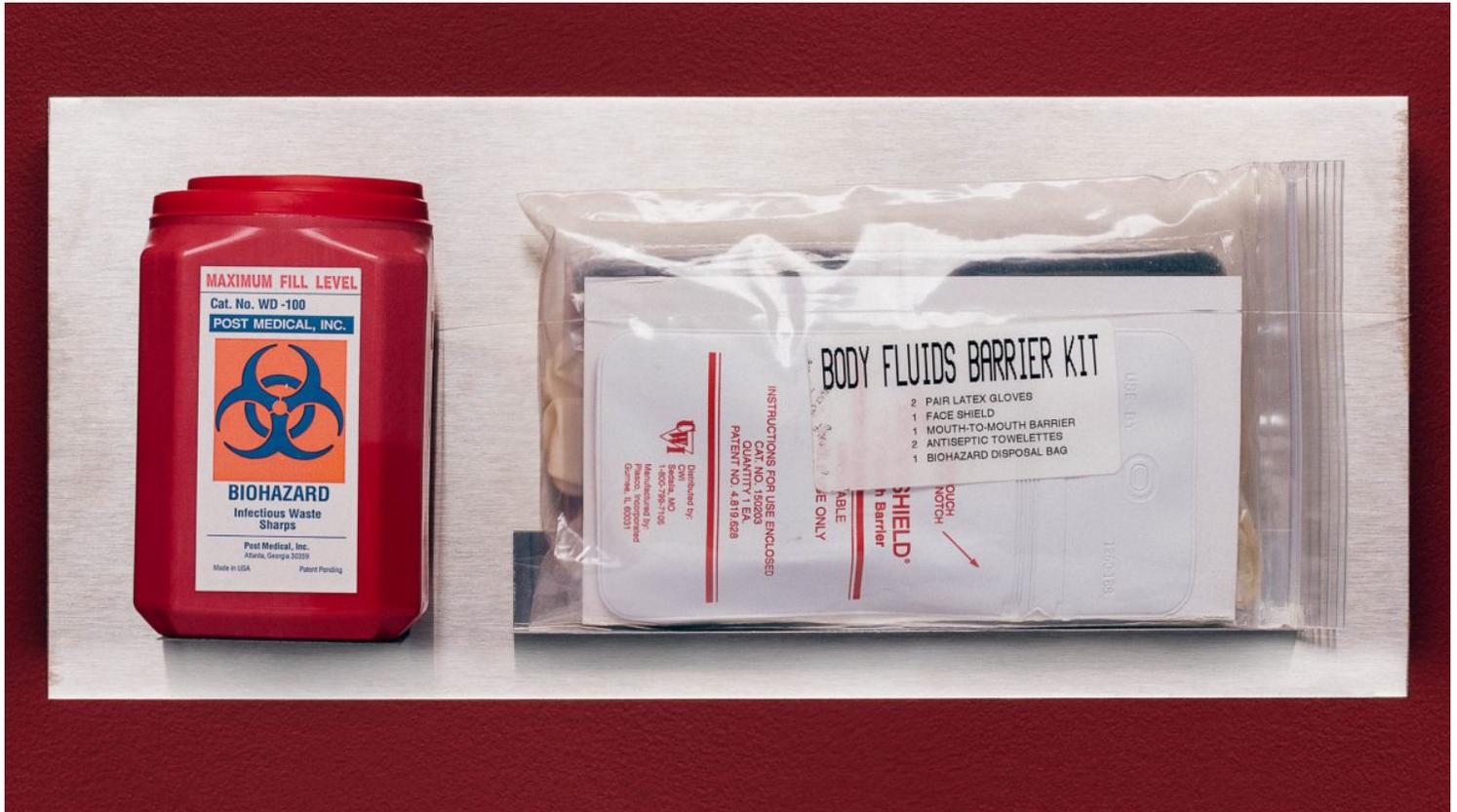
On June 5, 1981, CDC published a report in the *MMWR* describing requests for the drug pentamidine to treat a deadly disease called *Pneumocystis carinii* pneumonia (PCP) in five previously healthy young men in Los Angeles. After the report's publication, health officials also noticed a spike in cases of **Kaposi's sarcoma (KS)** among gay men in New York. Health officials were alarmed that outbreaks of both PCP and KS, which were rare, deadly diseases associated with immune suppression, appeared in the same part of the population.



## CDC Investigates

In response, CDC formed a **Task Force on KS/OI** in the summer of 1981. From the very beginning, investigators thought the problem was most likely due to an infectious agent that could be transmitted through sexual contact, although some speculated that recreational drugs or other environmental factors could also be causes. In late 1981, cases began to be

seen in injection drug users who were heterosexual, suggesting a pattern of infection that could be transmitted through blood. By early 1982, health experts were concerned that transmission through heterosexual contact, transmission to newborns, or transmission through the blood supply could come next. These predictions came true. Transmission through the blood supply was confirmed when immunosuppression was reported in three people with [hemophilia](#). Representatives from CDC, other health organizations, other scientists, and representatives from blood banks, gay rights organizations, and hemophiliacs, met in Washington D.C. to determine ways to prevent the transmission and develop guidelines to screen the blood supply.



## New Guidelines: The “Universal Precautions”

CDC issued guidelines for health workers providing care to AIDS patients and for laboratory technicians performing tests on potentially infectious materials from AIDS patients. The recommendations became known as “[universal precautions](#),” and included wearing gloves when exposed to blood and other bodily fluids. In a poster promoting health workers using safety precautions, a group of five health workers are shown wearing gloves, masks, and goggles. Since the universal precautions also established using safe needle disposal cases, a needle disposal container is on display with the body fluids barrier kit. The disposal case is a red sealed plastic container with the biohazard symbol displayed prominently on all sides and an opening at the top into which used needles are disposed.

## ELISA: The First HIV Blood Test



In CDC's immunology lab, scientists began working with AIDS specimens as early as July 1981 to understand how the immune systems of young, healthy men were so compromised by the mystery illness. In a photograph from 1983 displayed here, a female CDC research chemist conducts tests on biological fluids from AIDS patients. This work contributed to the theory that an **infectious agent**, not a genetic defect, was the cause of the disease. CDC's virology labs were among a network of international research centers searching for the virus believed to be the cause of AIDS.

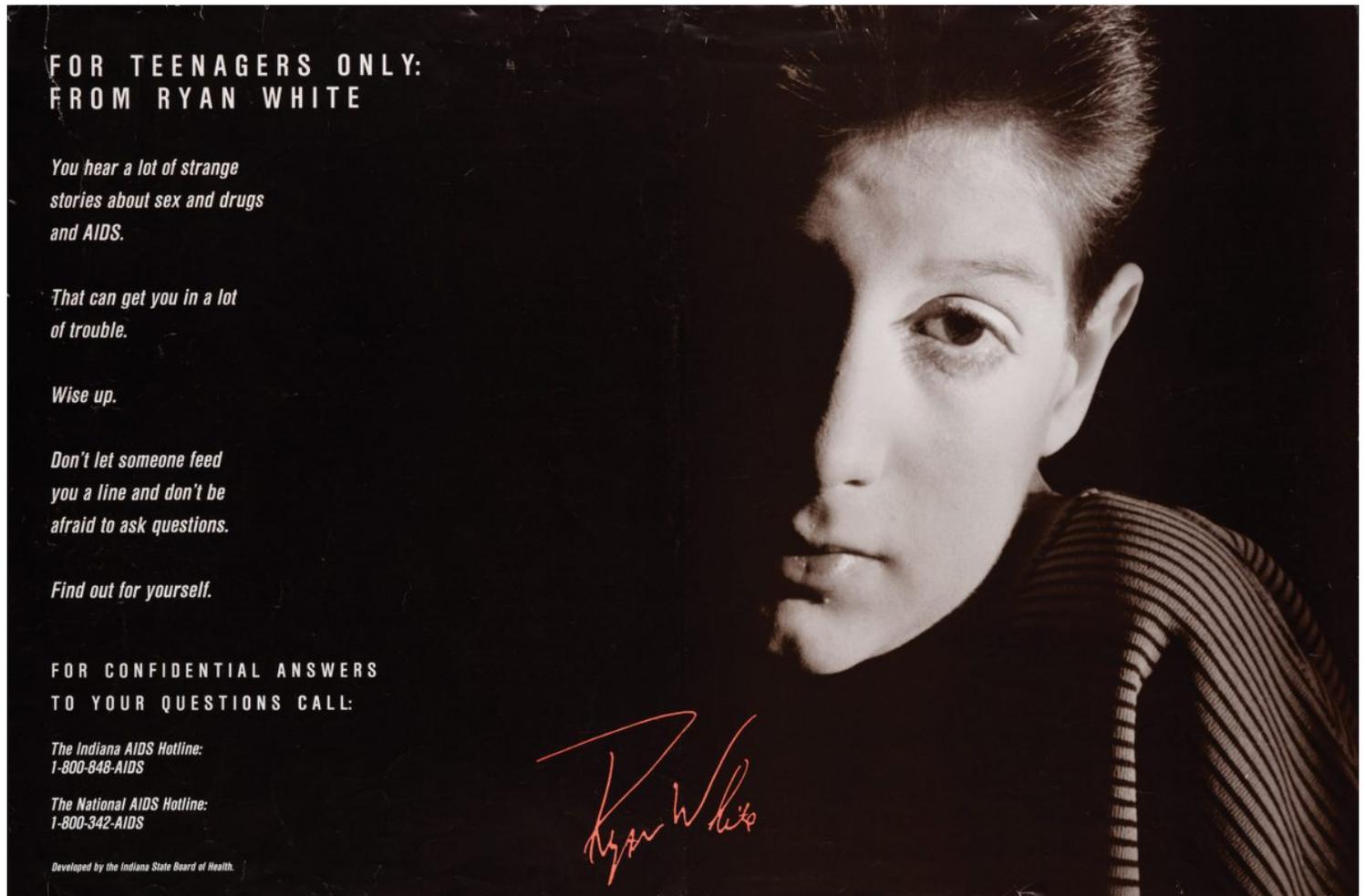
By the next year, the U.S Food and Drug Administration licensed the first commercial blood test, ELISA, to detect **HIV**. Blood banks begin screening the U.S. blood supply. In a photograph on display, a different CDC lab technician is performing the





ELISA test. Using a plastic plate with 96 wells, the lab technician adds the patient's blood to different enzymes. Certain

reactions between the blood and the enzymes indicated the presence of HIV antibodies.



**FOR TEENAGERS ONLY:  
FROM RYAN WHITE**

*You hear a lot of strange  
stories about sex and drugs  
and AIDS.*

*That can get you in a lot  
of trouble.*

*Wise up.*

*Don't let someone feed  
you a line and don't be  
afraid to ask questions.*

*Find out for yourself.*

**FOR CONFIDENTIAL ANSWERS  
TO YOUR QUESTIONS CALL:**

*The Indiana AIDS Hotline:  
1-800-848-AIDS*

*The National AIDS Hotline:  
1-800-342-AIDS*

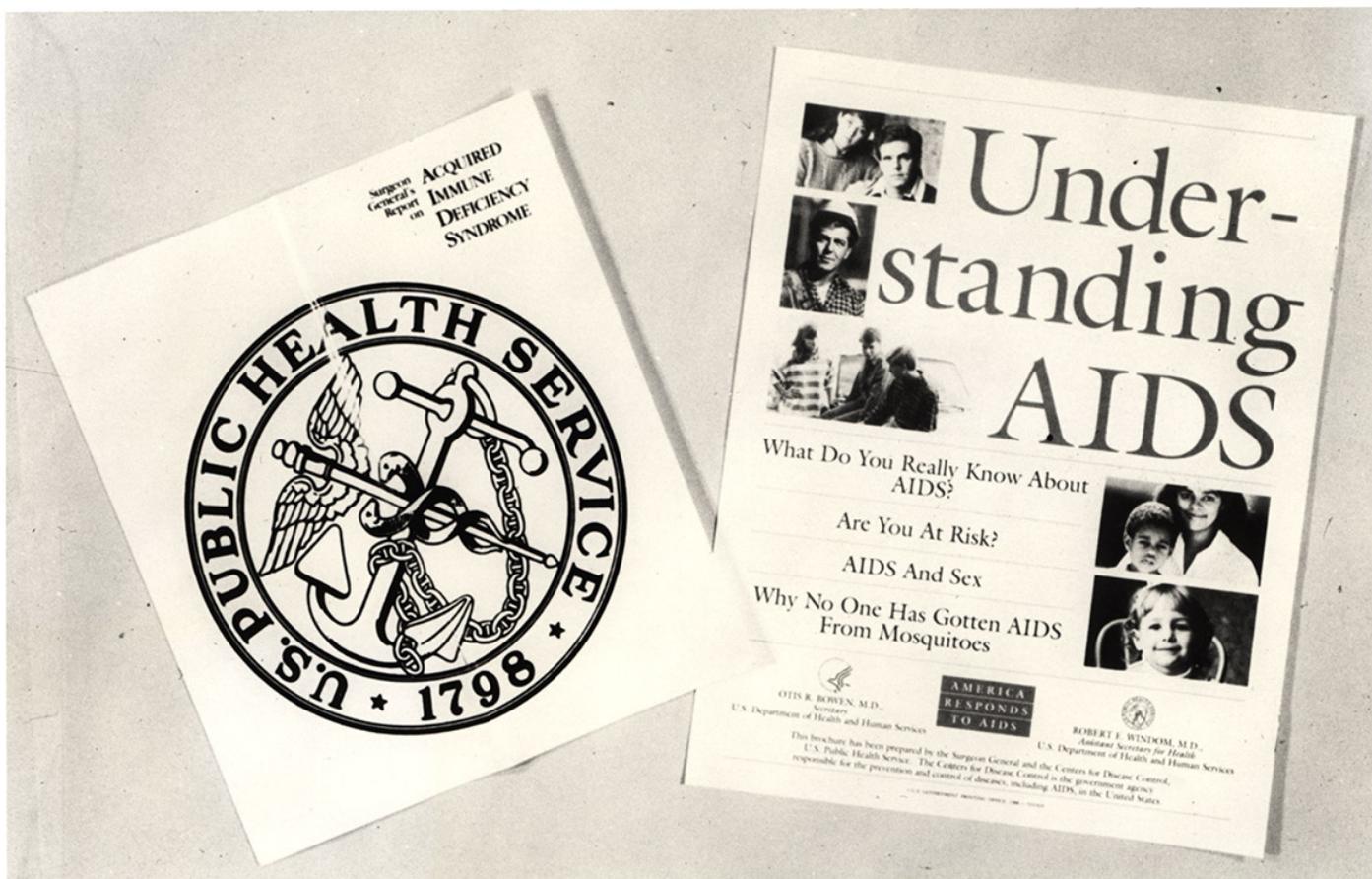
Developed by the Indiana State Board of Health.

*Ryan White*

## Stigma: Educating a Nation

The [first year of the AIDS epidemic](#) seemed isolated to a few individuals in a few cities, so it received little media attention. When cases were reported in infants and people with hemophilia, widespread panic struck Americans. Those with AIDS were often stigmatized. In 1985, Ryan White, a teenage hemophiliac living in Indiana, contracted AIDS from a blood transfusion. Parents in his community feared he would expose their children to AIDS, resulting in Ryan being barred from attending school.

In 1986, U.S. Surgeon General C. Everett Koop issued the [Surgeon General's Report on AIDS](#). In it, he called for a comprehensive program of sex and AIDS education, urged the [widespread use of condoms](#), and dispelled myths that HIV could be spread by mosquitoes. In 1987, CDC launched an unprecedented national campaign, *America Responds to AIDS*



(ARTA). The goal of ARTA was to increase awareness and understanding of AIDS, to prevent HIV infection, and to encourage people to seek more information and counseling. CDC also began a program to support HIV prevention efforts with national minority organizations that provided HIV prevention expertise to community-based organizations, developed HIV prevention programs targeting minorities, especially African Americans and Hispanics, and supported groups that used culturally sensitive AIDS prevention programs to address their communities' needs.

**The Normal Immune System**  
This Way in the Body  
Bacteria, Parasites, Virus, Cancer, Microphages, T4's, T Cells, Antibodies

**The Damaged Immune System**  
Microphages, T4's, T Cells, Antibodies

**Life Cycle of HIV**  
1. Binding of HIV to host cell  
2. Decoding of RNA into DNA  
3. Joining of HIV DNA to host cell DNA  
4. Production of HIV components  
5. Assembly of HIV  
6. Release of HIV

**Spectrum of HIV Infection**  
Health Status: No Symptoms, Some Symptoms, AIDS  
Immune System Function: Normal, Moderate Destruction, Severe Destruction

**AIDS: The Tip of the Iceberg**  
AIDS, Some Symptoms, Asymptomatic

**Three Routes of HIV Transmission**  
Sexual, Blood-associated, Mother to Unborn Child

**Risk Behaviors/Conditions of Persons with AIDS**  
Pie charts showing percentages for US and IL.

**Testing should always be accompanied by counseling**  
Testing, Counseling

**Pros and Cons of HIV Testing**  
+ Pros: Reduce anxiety, Obtain information, Early intervention and care, Inform partners, Postpone pregnancy  
- Cons: Fear of discrimination, Psychological trauma, Inability to cope

**Wisconsin Statutes Provide for**  
Testing blood/plasma donors, Release of test results in cases of significant exposure, Reporting of test results to the State Epidemiologist, Informed consent, Restricted access to test results, Penalties for unlawful disclosure

**The Wisconsin AIDS/HIV Education and Service Network**  
AIDS action groups, State-level and advisory groups, Blood banks and transfusion centers, Social service providers, General public, AIDS/HIV Program, State state and national organizations, Educators, Medical professionals, Day & lesson health agencies, Religious and industry, Counseling & Testing sites, Minority organizations, Clergy

**An HIV-Infected Individual's Need for Services**  
Psychosocial, Physical, Emotional, Spiritual, Legal, Medical, Individual needs

**Education Must be Directed to**  
Individuals with HIV, Health care professionals, Other health care providers, Other community organizations, Educational institutions, Parents, Community organizations

**School-based Education**  
STI, AIDS/HIV, Education, Fear

**What you can do**  
Keep informed, Practice safe behavior, Educate others, Be supportive, compassionate, Donate time or money

APRIL 1987  
WIS AIDS/HIV PLAN

# Prevention: The Best Strategy

Even before CDC was designated in 1986 as the lead federal agency to inform and educate Americans about AIDS, the agency worked “with uncommon flexibility” with state and local public health agencies and community-based organizations to reach people most at risk. Science-based guidelines were translated into messages for target groups about how to make healthy choices, and how to prevent the spread of the disease. Other campaigns were designed to fight against stigma and fear by informing people about the nature of the disease, teaching tolerance and compassion for those who were HIV positive.

Displayed here are a set of slides from the HIV/AIDS *Library and Narrative* used by the Wisconsin Department of Health and Human Services in 1989 to train community-based AIDS service organizations. Furthermore, since testing became available in 1985, CDC began providing federal funds to establish an extensive system of alternate testing and counseling sites, leading to the first nationwide HIV- and AIDS-related prevention program. Today, [testing](#)—knowing one’s HIV status—is a key strategy in AIDS prevention.

In the 21<sup>st</sup> Century, [AIDS has become one of our greatest public health challenges](#). The epidemic’s global impact has been staggering, claiming the lives of more than 39 million people worldwide, including 500,000 people in the United States. In the United States, an estimated 1.1 million people live with HIV/AIDS and every year, about 38,000 new HIV infections occur. While AIDS can be managed with antiretroviral drug treatments, there is still no cure or vaccine for AIDS. Prevention is still the best strategy.

## Enrichment Modules

SEE

### Take a closer look:

- Learn about [the basics of HIV](#) and explore a wealth of CDC [factsheets](#) about how HIV affects specific populations in the U.S. For a global perspective, check out the [World Health Organization](#) [information hub](#) for HIV/AIDS.
- What does it mean to have “undetectable” HIV infection? Learn more in [this CDC video](#) .
- Explore the [scope and impact](#)  of HIV in the U.S., as well as who is at higher risk for HIV infection and why.
- Examine this [illustration](#) of HIV. To get a closer look, check out a scanning electron microscope [image](#) and thin-section transmission electron microscope [image](#).
- Looking for HIV educational materials for patients, clinicians, and everyone in between? [CDC’s HIV Nexus](#) has comprehensive resources, tools, and guidelines.
- Explore CDC’s role in [ending the HIV Epidemic](#).
- Want a more detailed breakdown of HIV and its global impact? Explore a comprehensive library of [charts and graphs](#)  about HIV.

## HEAR

### From the source:

- Find photographs, oral histories, and original documents from CDC's early response to HIV/AIDS through [Global Health Chronicles](#) .
- Read [firsthand accounts](#) from World AIDS Day 2017.
- See how [Let's Stop HIV Together](#)  partners are working together to increase awareness of HIV testing, treatment, screening, and prevention options.
- Find [video stories](#) from CDC's Let's Stop HIV Together campaign.
- Why is it so hard to cure HIV/AIDS? Watch this [Ted-Ed video](#)  exploring just that.

## REFLECT

### Then and now:

- Explore a comprehensive library of charts and graphs about HIV through the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention resource, [AtlasPlus](#).
- Read about [CDC's HIV Prevention Progress in the U.S.](#) from the Division of HIV/AIDS Prevention.
- Learn more about [PEPFAR](#), the U.S. President's Emergency Plan for AIDS Relief, and how CDC is helping drive progress against global HIV/AIDS.
- Public health, art, and poetry have a lot in common. Explore the parallels between the artistic technique of cubism (breaking objects into parts and reassembling) and HIV in this issue of [Emerging Infectious Diseases](#).
- How has our understanding of HIV/AIDS evolved over the years? Take a deep dive into this [timeline](#)  spanning from the first reported cases in 1981 to the present.
- Stay up-to-date with HIV/AIDS news with HIV-related [Morbidity and Mortality Weekly Reports](#).
- What comes next? Learn about [prevention and care outcomes](#)  of HIV in the U.S.
- Find the [latest updates](#) about HIV/AIDS from CDC's Division of HIV/AIDS Prevention.

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**DO**

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**Give it a try:**

- How much do you know about HIV/AIDS? Explore prevention tips, key facts, and more with [CDC's Disease of the Week HIV feature](#), then try your hand at a short quiz.
- Take a deep dive into the past, present, and future of CDC's HIV/AIDS work in this CDC Museum [Public Health Academy Teen Newsletter](#).
- Find out how to get involved with the next [World AIDS Day](#).
- Interested in taking your knowledge a step further? Find free [continuing education opportunities](#) focused on HIV/AIDS through CDC's HIV Nexus.
- Has a friend or loved one been diagnosed with HIV? Find FAQ and materials about [living well with HIV](#).
- Looking for [social media toolkits](#) to promote HIV prevention, testing, treatment, and anti-stigma messaging?
- Want to see the inside of the HIV virus? Check out this 3D rendering of the internal composition and nucleocapsid of HIV — and 3D print your own — through the [National Institutes of Health 3D Print Exchange](#) [↗](#) .

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Content source: [Centers for Disease Control and Prevention](#)